
INDEX

ASTROPHYSICS

Volume 5, Numbers 1-4, 1969



Astrophysics

Contents

Volume 5, Number 1 · Spring 1969

Editorial Board

Astrofizika

a publication of the
Academy of Sciences
Armenian SSR

V. A. Ambartsumyan,
Editor-in-Chief

L. V. Mirzoyan,
Associate Editor

A. A. Boyarchuk
V. A. Dombrovskii
Ya. B. Zel'dovich
S. A. Kaplan
B. E. Markaryan
V. V. Sobolev
G. M. Tovmasyan

	Russian page	English page
Diffuse Reflection and Transmission of Light by the Atmosphere in the Case of Anisotropic Scattering. V. V. Sobolev	5	1
Scattering of Radiation Within a Spectral Line Emitted by Turbulent Plasma. S. A. Kaplan and V. N. Tsytovich	21	8
Nonstationary Radiation Fields in Infinite Media. D. I. Nagirner	31	13
Emission of Novas Prior to Light Maximum. V. V. Leonov	55	23
Gas Motion in Close Binary Systems. Yu. P. Korovyakovskii	67	29
Curve of Growth for an Expanding Atmosphere. M. A. Arakelyan	75	32
Expansion of Planetary Nebulas. V. V. Vityazev	83	36
Slow Rotation of Relativistic Polytropic Models. V. V. Papoyan, D. M. Sedrakyan, and E. V. Chubaryan	97	43
Spectral Observations of Markaryan Galaxies with Ultraviolet Continuum. II. D. W. Weedman and E. E. Khachikyan	113	51
Spectrophotometry of F Stars. IV. Line Profiles in the Spectra of σ Boo, ν Her, and 41 Cyg. T. A. Kipper	123	60
The Andromeda Galaxy M 31. I. A Preliminary Model. Ya. I. Einasto	137	67
Investigation of the Dynamics of Triple Systems by the Monte Carlo Method. III. The Case of Components with Different Masses. Zh. P. Anosova	161	81
Brief Communications		
Salmona's Paper on Models of Static Configurations. R. M. Avakyan and M. A. Mnatsakanyan	169	85

Single Issue: \$40

Annual Subscription: \$100

Astrophysics

Contents

Volume 5, Number 2 · Summer 1969

Editorial Board

Astrafizika

a publication of the
Academy of Sciences
Armenian SSR

V. A. Ambartsumyan,
Editor-in-Chief

L. V. Mirzoyan,
Associate Editor

A. A. Boyarchuk

V. A. Dombrovskii

Ya. B. Zel'dovich

S. A. Kaplan

B. E. Markaryan

V. V. Sobolev

G. M. Tovmasyan

	Russian page	English page
Some Asymptotic Formulas in the Theory of Anisotropic Scattering of Light. A. K. Kolesov and V. V. Sobolev	175	87
Transfer of Resonance Radiation from a Point Source in a Half-Space. Yu. Yu. Abramov and A. P. Napartovich	187	92
Nonlinear Time-Dependent Problem of Radiation Transfer Within a Spectral Line. R. S. Vardanyan and N. B. Engibaryan	203	98
Relative Intensities of Hydrogen Lines in the Spectra of Nebulas. V. P. Grinin	213	101
Models of Clusters of Point Masses with Large Central Redshifts. G. S. Bisnovatyi-Kogan and Ya. B. Zel'dovich	223	105
Interaction Between Low-Frequency and High-Frequency Stellar Pulsations. Yu. V. Vandakurov and Ya. B. Zel'dovich	235	110
Relation Between White Dwarfs and Type I Supernovae. G. S. Bisnovatyi-Kogan and Z. F. Seidov	243	113
Spectra of Stars in Cometary Nebulas. E. A. Dibai	249	115
Total Line and Band Absorption in the Spectra of F-M Stars. M. G. Rodriguez	269	125
Estimated Intensity of the Scintillating Component of the Source 3C 273 at 86 and 60 MHz. T. D. Antonova, V. V. Vitkevich, and V. G. Panadzhyan	283	134
Estimated Angular Size of the Radio Source 3C 48 at 60 MHz Using Scintillation Measurements. V. G. Panadzhyan	291	137
Spectral Index of Extragalactic Radio Sources as a Function of the Flux Density. R. D. Dagkesamanskii	297	140
Models of Stellar Systems Developed on the Basis of a Numerical Experiment. T. A. Agekyan and A. S. Baranov	305	144
Model of the Mass Distribution in M 31. II. V. S. Sizikov	317	150
The Masses of Cepheids. I. N. Latyshev	331	156

(Continued)

Single Issue: \$40

Annual Subscription: \$100

Contents (cont'd)

	Russian page	English page
Brief Communications		
Possible Interpretation of Short-Period Light Variations of DQ Her. V. I. Taranov	337	158

Astrophysics

The Consultants Bureau
cover-to-cover translation of
Astrofizika

Contents

Volume 5, Number 3 · July-September, 1969

Editorial Board

Astrofizika

a publication of the
Academy of Sciences
Armenian SSR

V. A. Ambartsumyan,
Editor-in-Chief

L. V. Mirzoyan,
Associate Editor

A. A. Boyarchuk
V. A. Dombrovskii
Ya. B. Zel'dovich
S. A. Kaplan
B. E. Markaryan
V. V. Sobolev
G. M. Tovmasyan

	Russian page	English page
Anisotropic Scattering of Light in an Atmosphere of Finite Optical Thickness. V. V. Sobolev	343	161
Polychromatic Scattering of Light in a Half-Space. V. Yu. Terebizh	359	167
Hydrogen-Line Intensities in the Spectrum of an Optically Thick Plasma. V. P. Grinin.	371	172
Light Curves of Flare Stars. G. A. Gurzadyan	383	178
Effect of Electron Screening in Nuclear Reactions at High Densities. V. V. Porfir'ev and Yu. N. Redkobodoyi	393	184
Slow Rotation of White Dwarfs and Baryon Stars. V. V. Papoyan, D. M. Sedrakyan, and E. V. Chubaryan	415	192
Equilibrium States of a System of Gravitating Particles. G. S. Bisnovatyi-Kogan and Ya. B. Zel'dovich	425	198
Velocity Distribution Function for Bodies of Small Mass in Clusters. V. S. Kaliberda	433	201
Galaxies with an Ultraviolet Continuum. II. B. E. Markaryan	443	206
Evolutionary Effects Associated with Quasi-Stellar Radio Sources. I. M. A. Arakelyan	461	226
Intrinsic Polarization of Radiation from RY Persei. O. S. Shulov and G. A. Gudkova	477	237
Relaxation of Stars in Plane Subsystems of the Galaxy on the Spiral Structure. L. S. Marochnik	487	242
Brief Communications		
Two Remarkable Flare Stars in the Pleiades. E. S. Parsamyan and O. S. Chavushyan	499	247
Photoelectric Photometry of the Wolf-Rayet Binary HD 211853. A. A. Guseinzade	502	249
Ellipticity of Slowly Rotating Configurations. Z. F. Seidov	503	250

Published quarterly by Consultants Bureau.

Subscription

Single Issue: \$30

Annual Subscription: \$100

Application to mail at second-class postage rate is pending
at Jamaica, New York.

CONSULTANTS BUREAU, NEW YORK AND LONDON



227 West 17th Street
New York, New York 10011

Davis House
8 Scrubs Lane
Harlesden, NW10 6SE
England

© 1971 Consultants Bureau, New York a division of Plenum
Publishing Corporation, 227 West 17th Street, New York,
New York 10011. All rights reserved. This publication or
parts thereof may not be reproduced in any form without
permission of the publisher.

Astrophysics

The Consultants Bureau
cover-to-cover translation of
Astrofizika

Contents

Volume 5, Number 4 · Winter 1969

Editorial Board

Astrofizika

a publication of the
Academy of Sciences
Armenian SSR

V. A. Ambartsumyan,
Editor-in-Chief

L. V. Mirzoyan,
Associate Editor

A. A. Boyarchuk

V. A. Dombrovskii

Ya. B. Zel'dovich

S. A. Kaplan

B. E. Markaryan

V. V. Sobolev

G. M. Tovmasyan

	Russian page	English page
Transfer of Resonance Radiation in an Optically Thick Layer. D. I. Nagirner	507	251
Line Formation in the Presence of a Magnetic Field. Part I. The Scattering Matrix. H. Domke	525	259
Kinetic Theory of Neutrinos in Anisotropic Cosmologic Models. A. G. Doroshkevich, Ya. B. Zel'dovich, and I. D. Novikov	539	264
Generalized Relativistic Theory of Gravitation. II. Baryon Configurations. G. S. Saakyan and M. A. Mnatsakanyan	555	271
Galaxies with Ultraviolet Continuum. III. B. E. Markaryan	581	286
Central Condensations in Sa Galaxies. K. A. Saakyan	593	302
Nature of Evolutionary Effects Connected with Quasi-Stellar Radio Sources. II. M. A. Arakelyan	603	308
Effect of Radiation on Convection in a Polytopic Atmosphere. N. S. Petrukhin	615	318
Rotating Systems of Gravitating Bodies in the Quasi-Stationary State. T. A. Agekyan and I. M. Micheile	623	322
Formation of Binary Systems During Triple Encounters. T. A. Agekyan, Zh. P. Anosova, and V. N. Bezgubova	637	329

Brief Communications

Polytropic Models in the Relativistic Generalized Theory of Gravitation. M. A. Mnatsakanyan	645	332
Cosmologic Solutions of the Jordan-Dicke Field Equations and Observational Data. A. V. Mandzhos	649	334
Interaction Between Vortex and Potential Motions in Relativistic Hydrodynamics. I. A. D. Chernin and E. D. Eidel'man	654	337
Interaction Between Vortex and Potential Motions in Relativistic Hydrodynamics. II. A. D. Chernin	656	338

Index

Published quarterly.

Single Issue: \$30

Annual Subscription: \$100

Application to mail at second-class postage rate is pending
at Jamaica, New York.

CONSULTANTS BUREAU, NEW YORK AND LONDON



227 West 17th Street
New York, New York 10011

Davis House
8 Scrubs Lane
Harlesden, NW10 6SE
England

© 1972 Consultants Bureau, New York, a division of Plenum
Publishing Corporation, 227 West 17th Street, New York,
New York 10011. All rights reserved. This publication or
parts thereof may not be reproduced in any form without
permission of the publisher.

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

2000-01-01

